

A close-up photograph of tall, golden-brown grasses, possibly reeds or sedges, blowing in the wind. The background is a soft, hazy sky, suggesting a sunset or sunrise. The grasses are in sharp focus in the foreground, creating a sense of depth and movement.

Product Analysis Search Book  
Mid Cap J U`Y

Summer 2017

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# MANAGER SEARCH PROCESS

## **An important step toward fulfilling the fiduciary role required of an investment committee or board of trustees**

- “...courts objectively assess whether the fiduciary, at the time of the transaction, utilized proper methods to investigate, evaluate and structure the investment; acted in a manner as would others familiar with such matters; and exercised independent judgment when making investment decisions.”
  - *Laborers National Pension Fund v. Northern Trust Quantitative Advisors, Inc.*, 23 EBC 1001 (5<sup>th</sup> Cir April 16, 1999)
- “5 characteristics a fiduciary should consider in examining a contemplated investment:
  - Degree and nature of risks, and relationship of volatility to diversification needs of portfolio,
  - Marketability,
  - Transaction costs,
  - Expected total return,
  - Special characteristics, affecting risk-reward tradeoffs.”

~ (R3d, Sec. 227, com. K)

# IMPLEMENT WITH HIGH QUALITY, LOW COST INVESTMENT VEHICLES

- Completely open universe with no proprietary funds
- Proper benchmarking is key to performance evaluation
- Consistent managers perform better in the long run
- Risk management is integral at every step and on every level
- A complete understanding of the "whys" of performance is crucial
- There is a direct trade-off between performance and fees and expenses



# MANAGER EVALUATION

Our forward-looking due diligence process strives to separate luck from skill in manager performance.

## Manager Identification

- Quantitative & fundamental screening (databases)
- Direct solicitation by managers
- Referrals from industry contacts
- Multiple manager databases
- Trade journals
- Referrals from investors

## Quantitative Analysis

- Performance analysis
- Performance attribution
- Consistency analysis
- Market exposures/risks responsible for driving returns
- Risk-adjusted value added vs. benchmarks and peers

## Qualitative Analysis

- Organizational and personnel evaluation
- Experience and stability
- Philosophy and process uniqueness and sustainability
- Conflicts, compensation, and board structure

## Manager Assessment

- Why should we hire?
- What edge does the manager have over its peers?
- Intellectual, strategy, resource, implementation
- Pros and cons

# VANGUARD SELECTED VALUE FUND

Subadvisor	N/A
Fund Size	\$10.2 Bln
Current # of Holdings	125

Strategy Inception	2/15/1996
Year End Turnover	27%
Avg. Manager Tenure (Yrs.)	9

## Purchase Information

Ticker	Net Expense Ratio	Minimum Purchase	Revenue Sharing
VASVX	0.35%	N/A	0.00%

## Portfolio Management

- The fund's assets are divided among three advisors and collectively managed by 7 portfolio managers: James Barrow and Mark Giambrone of Barrow Hanley; Donald Smith and Richard Greenberg of Donald Smith & Co; Richard Pzena, John Flynn, and Eli Rabinowich of Pzena.

# INVESTMENT PROCESS

## Identify Value through Bottom-up Research

The subadvisors invest mainly in the stocks of mid-size U.S. companies, considered to be undervalued. Undervalued stocks are generally those that are out of favor with investors and are trading at prices that the advisor feels are below average in relation to measures such as earnings and book value. These stocks often have above-average dividend yields. The fund favors a long term investment horizon with low turnover, and high active share. Vanguard Selected Value is currently managed by three subadvisors: Barrow, Hanley, Mewhinney & Stauss, Donald Smith & Co, and Pzena Investment Management.

- **Barrow, Hanley, Mewhinney & Strauss:** This fund holds approximately 65% of the portfolio and focuses on a tradition value approach. Its deep and tenured team of analysts look to hold 40-50 holdings that pay a dividend, thus providing income as their investment thesis unfolds. They believe that short-term disappointments provide an opportunity to invest in quality companies at a discount.
- **Donald Smith & Co.:** This fund holds approximately 20% of the portfolio and has a deep value approach. The fund typically holds anywhere from 15-30 companies that are considered to be in the lowest decile of price to tangible book value which follows academic research suggesting that these type of companies will generate the best long-term returns. Their in depth company research results in a very high conviction and low turnover.
- **Pzena:** This fund holds approximately 15% of the portfolio and focuses on a deep value approach as well. The fund holds anywhere from 50-80 holdings that meet three criteria: problems judged to be temporary, management has a viable plan to generate earning recovery, and meaningful downside protection in case earning do not recover. After initial review, the seven person investment team researches/constructs detailed financial models, management discussions, on-site visits, bull and bear analysis, and assess earnings power.

Portfolio Construction Targets			
Typical Number of Holdings	120	Holdings Limits	<5%
Industry Limits	N/A	Historical Turnover	24%

# PROS & CONS

## Pros

1. The fund is sub advised by experienced management teams that complement each other well.
2. Vanguard carries a strong brand reputation and historically has outperformed its peers.
3. The fund's expenses are low relative to its peers.

## Cons

1. The addition or removal of subadvisors could lead to strategy style shift going forward.
2. Two of the subadvisors maintain deep value biases, which could lead to outsized losses if bankruptcy risk is not priced correctly on a consistent basis.



# Vanguard Select Value 06/30/17

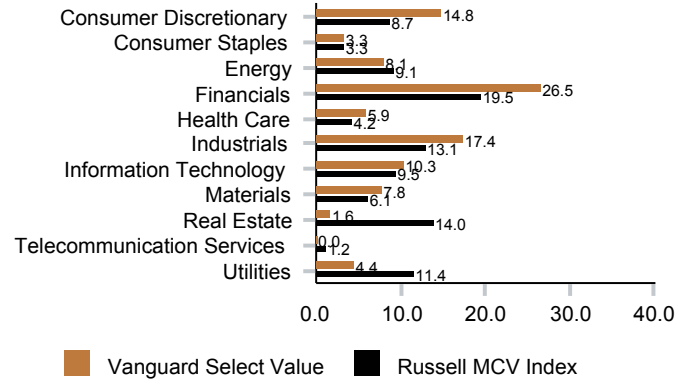
## PORTFOLIO CHARACTERISTICS

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$M	\$15,876	\$13,456
Median Mkt. Cap \$M	\$8,538	\$6,999
Price/Earnings ratio	17.50	19.36
Price/Book ratio	2.09	2.08
5 Yr. EPS Growth Rate (%)	12.34	9.15
Current Yield (%)	1.85	2.19
Beta (5 Years, Monthly)	1.00	1.00
% in Int'l Securities	23.61	5.77
Active Share	85.08	N/A
Number of Stocks	120	590

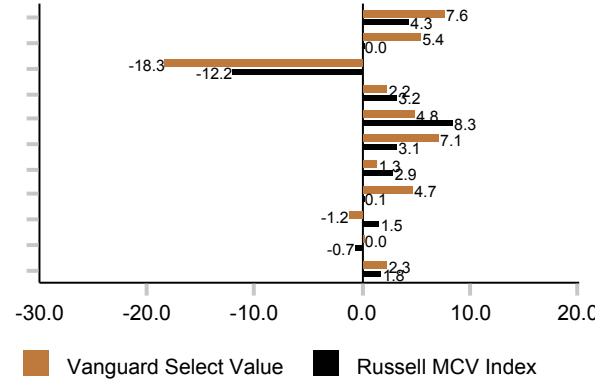
## TOP 10 HOLDINGS

	Portfolio Weight (%)	Benchmark Weight (%)	Quarterly Return (%)
Micron Technology Inc.	2.81	0.00	3.32
Royal Caribbean Cruises Ltd	2.35	0.49	11.82
Cigna Corp	2.28	0.00	14.27
Norwegian Cruise Line Holdings Ltd	2.26	0.23	7.02
Cardinal Health Inc	2.15	0.65	-3.89
Owens Corning	2.11	0.19	9.04
AerCap Holdings NV	2.11	0.00	1.00
Willis Towers Watson plc	2.08	0.48	11.53
Stanley Black & Decker Inc	2.08	0.51	6.36
Whirlpool Corp	1.94	0.33	12.52

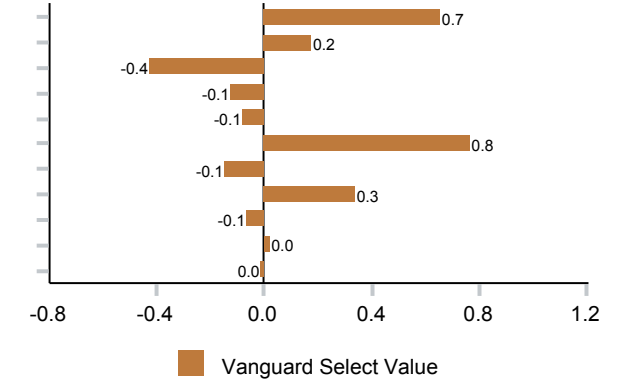
## SECTOR ALLOCATION



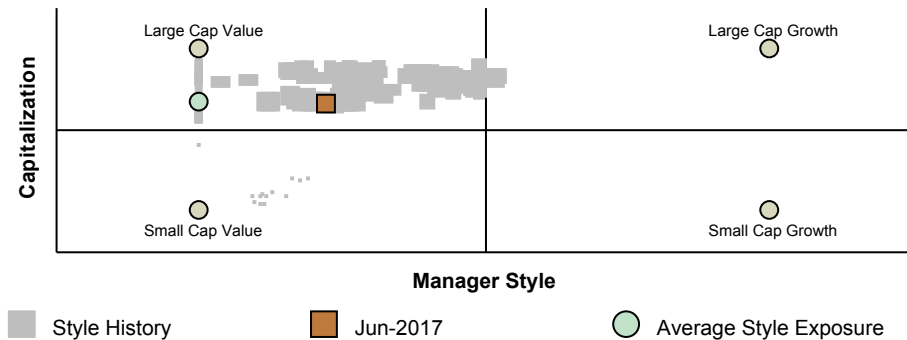
## SECTOR PERFORMANCE



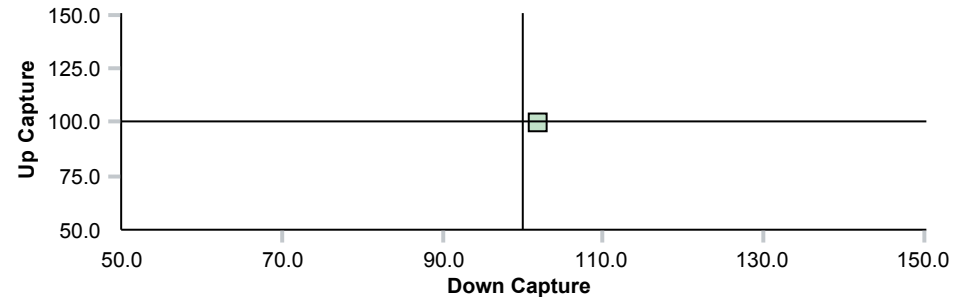
## TOTAL SECTOR ATTRIBUTION



## STYLE MAP (03/01/96 - 06/30/17)



## UP/DOWN CAPTURE (07/01/12 - 06/30/17)



# VIRTUS CEREDEX MID-CAP VALUE

Subadvisor	Ceredex Value Advisors
Fund Size	\$3.1 Bln
Current # of Holdings	72

Strategy Inception	11/30/2001
Year End Turnover	98%
Avg. Manager Tenure (Yrs.)	15.7

Purchase Information			
Ticker	Net Expense Ratio	Minimum Purchase	Revenue Sharing
SMVTX	1.09%	N/A	0.1%)
SMVZX	0.80%	N/A	0.00%

## Portfolio Management

- Donald Wordell, CFA
  - Mr. Wordell currently serves as a managing director and portfolio manager at Ceredex Value Advisors LLC. He has been a portfolio manager on the strategy since 2001 and has worked in investment management since 1996. Mr. Wordell began his investment career immediately following his completion of an M.B.A. Prior to joining Ceredex in 2001, Mr. Wordell worked as an equity research analyst at Trusco Capital Management.

# INVESTMENT PROCESS

## Dividend-Centric, Bottom-up Traditional Value

- Their investment philosophy emphasizes three key factors in selecting equities for portfolios: existence of a dividend, low valuation levels, and improving fundamental momentum or a fundamental catalyst that will cause a stock to appreciate upon recognition by the market. They believe under-valued, dividend-paying stocks with positive catalysts will yield consistent long-term investment results for their shareholders. While not yield focused, the firm seeks dividend payers because the team believes it gives them transparency into the company's financial situation.
- The strategy begins its process by applying market cap and dividend screens in order to identify potential candidates for the portfolio. At purchase, all securities must be within the Russell Mid Cap Index market cap range and issue a dividend. These stocks are then evaluated based on both relative and absolute valuations. Using the appropriate industry metric (P/E, P/CF, P/B, etc.), each stock is analyzed relative to peers, the industry, the market, and the company's own historical valuations; focusing on companies trading in the lower third of their historical valuations. From this list, analysts delve in to the financial statements of potential additions to the portfolio seeking to identify fundamental catalysts that might be expected to propel its share price to its historical mean within the next 12 to 18 months. Analysts also look to market sentiment to gauge whether or not the market will acknowledge the improvement within that same timeframe. Analysts work collaboratively on ideas with lead portfolio manager, Don Wordell, in an effort to calculate a price target. Mr. Wordell makes all final purchase decisions. Sells can be initiated if there is a negative dividend policy change, fundamentals deteriorate or the timing of the catalyst is extended, or for valuation reasons (price target met or more attractive risk/reward). A company is automatically sold if eliminates its dividend.

### Portfolio Construction Targets

Typical Number of Holdings	60-80	Holdings Limits	Max 5% at cost
Sector Limits	None	Historical Turnover	125% - 175%

# PROS & CONS

## Pros

1. Ceredex's dividend-centric focus not only results in yield, but may provide a level of cushion to help offset market declines.
2. The identification of specific fundamental catalysts that are expected to help initiate positive price movements may help the strategy avoid "value traps".
3. The strategy's transparent sell discipline removes much of the emotion from decisions.

## Cons

1. The lack of formal sector constraints and requirement of a dividend policy may cause the strategy to favor dividend paying sectors (utilities and financials) over typical non-dividend paying sectors (technology).
2. The strategy's higher turnover may be difficult to stomach for tax-sensitive investors.

# Virtus MCV Equity 06/30/17

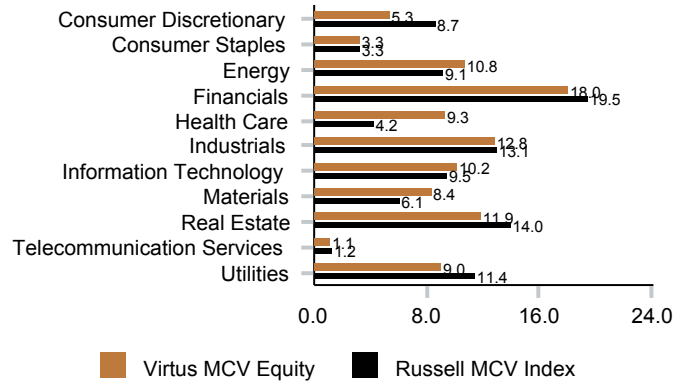
## PORTFOLIO CHARACTERISTICS

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$M	\$14,114	\$13,456
Median Mkt. Cap \$M	\$11,451	\$6,999
Price/Earnings ratio	21.46	19.36
Price/Book ratio	2.53	2.08
5 Yr. EPS Growth Rate (%)	9.84	9.15
Current Yield (%)	2.40	2.19
Beta (5 Years, Monthly)	1.04	1.00
% in Int'l Securities	8.40	5.77
Active Share	85.60	N/A
Number of Stocks	73	590

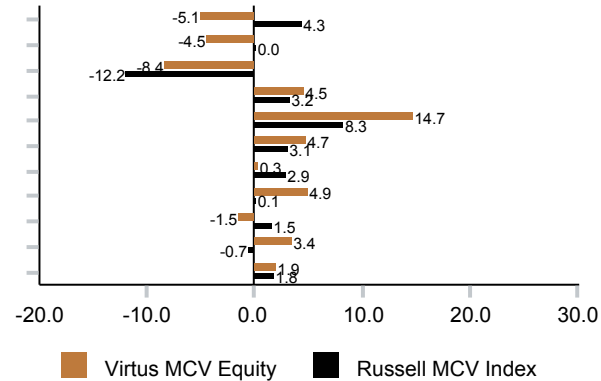
## TOP 10 HOLDINGS

	Portfolio Weight (%)	Benchmark Weight (%)	Quarterly Return (%)
Synchrony Financial	2.30	0.64	-12.67
Williams Cos Inc. (The)	2.03	0.56	3.40
Marathon Petroleum Corp	1.93	0.71	4.24
Noble Energy Inc	1.90	0.36	-17.32
STERIS plc	1.83	0.18	17.75
Cypress Semiconductor Corp	1.81	0.11	0.03
Air Products and Chemicals Inc.	1.80	0.00	6.45
Western Digital Corp	1.78	0.58	7.93
Cabot Oil & Gas Corp	1.77	0.09	5.11
MB Financial Inc	1.74	0.00	3.33

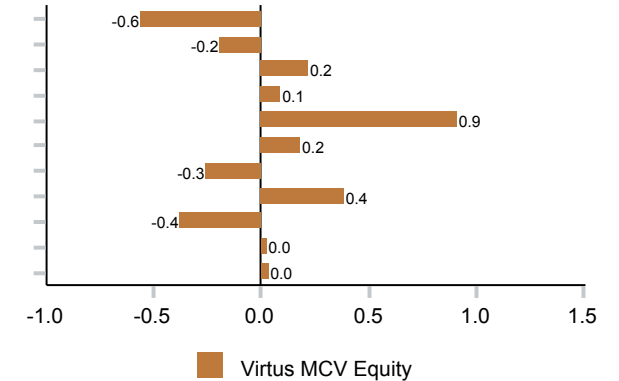
## SECTOR ALLOCATION



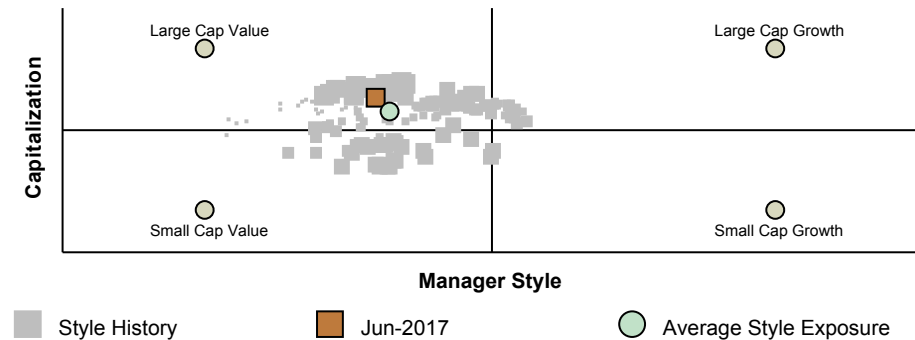
## SECTOR PERFORMANCE



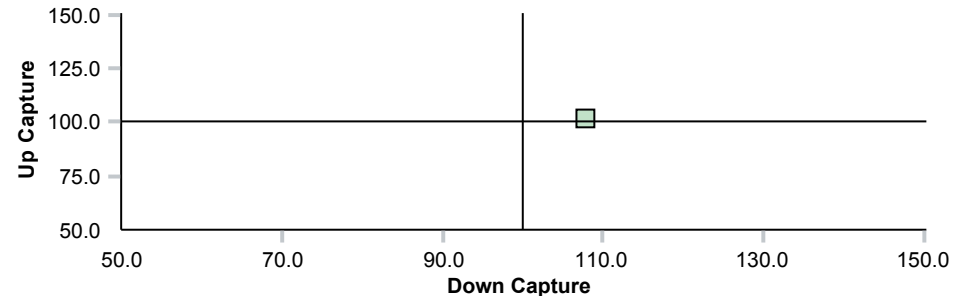
## TOTAL SECTOR ATTRIBUTION



## STYLE MAP (12/01/01 - 06/30/17)



## UP/DOWN CAPTURE (07/01/12 - 06/30/17)



## Manager Score Card

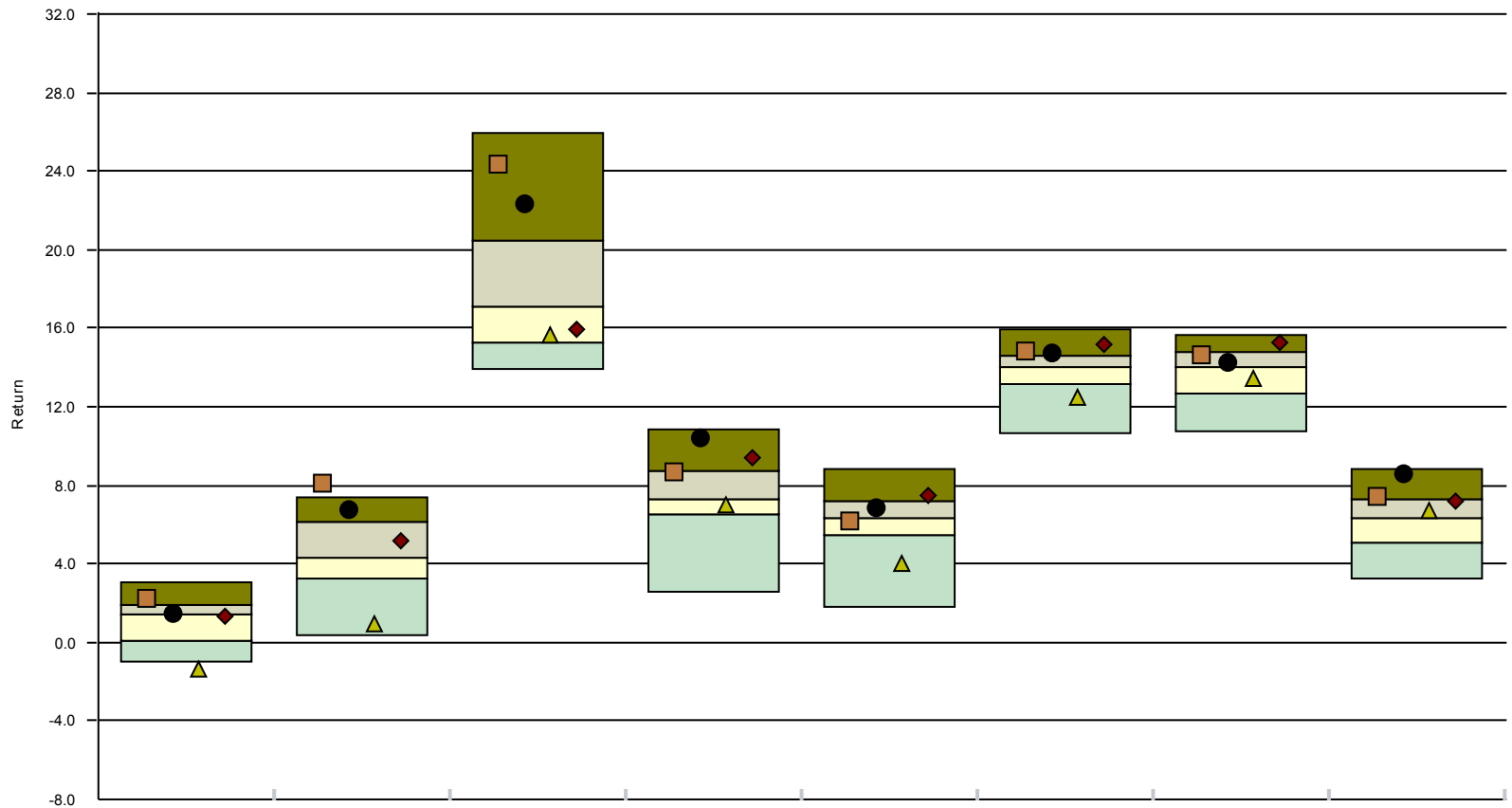
	Criteria								Costs		
	Organization	People	Philosophy & Process	Style Consistency	Asset Base	Performance	Expenses	Overall	Exp Ratio (%)	Median Exp Ratio (%)	Ratio of Exp to Median (%)
Vanguard Sel Value;Inv (VASVX)									0.35	1.16	30.17
Virtus Cer MC Val;IS (SMVZX)									0.80	1.16	68.97
BlackRock:Md Cp Div;I (MARFX)									0.94	1.16	81.03

Legend For Overall Criteria	
	No/Minimum Concerns
	Minor Concern
	Major Concern
	Under Review
	New No/Minimum Concerns
	Upgrade to Minor Concern
	Downgrade to Minor Concern
	New Major Concern

Manager	Score Factor	Comments
Virtus Cer MC Val;IS (SMVZX)	Organization	In December 2016 Virtus Investment partners announced it had reached an agreement to acquire RidgeWorth Investments. Ceredex Value Advisors will continue to serve as the subadvisor to the fund, which will reorganize under the Virtus franchise. No changes are expected to take place with the management, philosophy or process of the strategy, however, increased monitoring and due diligence is warranted surrounding the transaction.
BlackRock:Md Cp Div;I (MARFX)	People	Because of a change of the entire investment team, we are recommending that clients replace it.
BlackRock:Md Cp Div;I (MARFX)	Philosophy & Process	Both the investment team and the investment approach are changing, and so we are recommending that clients replace the fund.
BlackRock:Md Cp Div;I (MARFX)	Performance	This fund's performance has been hampered by stock selection, especially in the consumer discretionary, materials, and industrials sectors.
BlackRock:Md Cp Div;I (MARFX)	Overall	Due to the dramatic changes to the fund, we are recommending that clients replace it.

# IM U.S. Mid Cap Value Equity (MF) as of 06/30/17

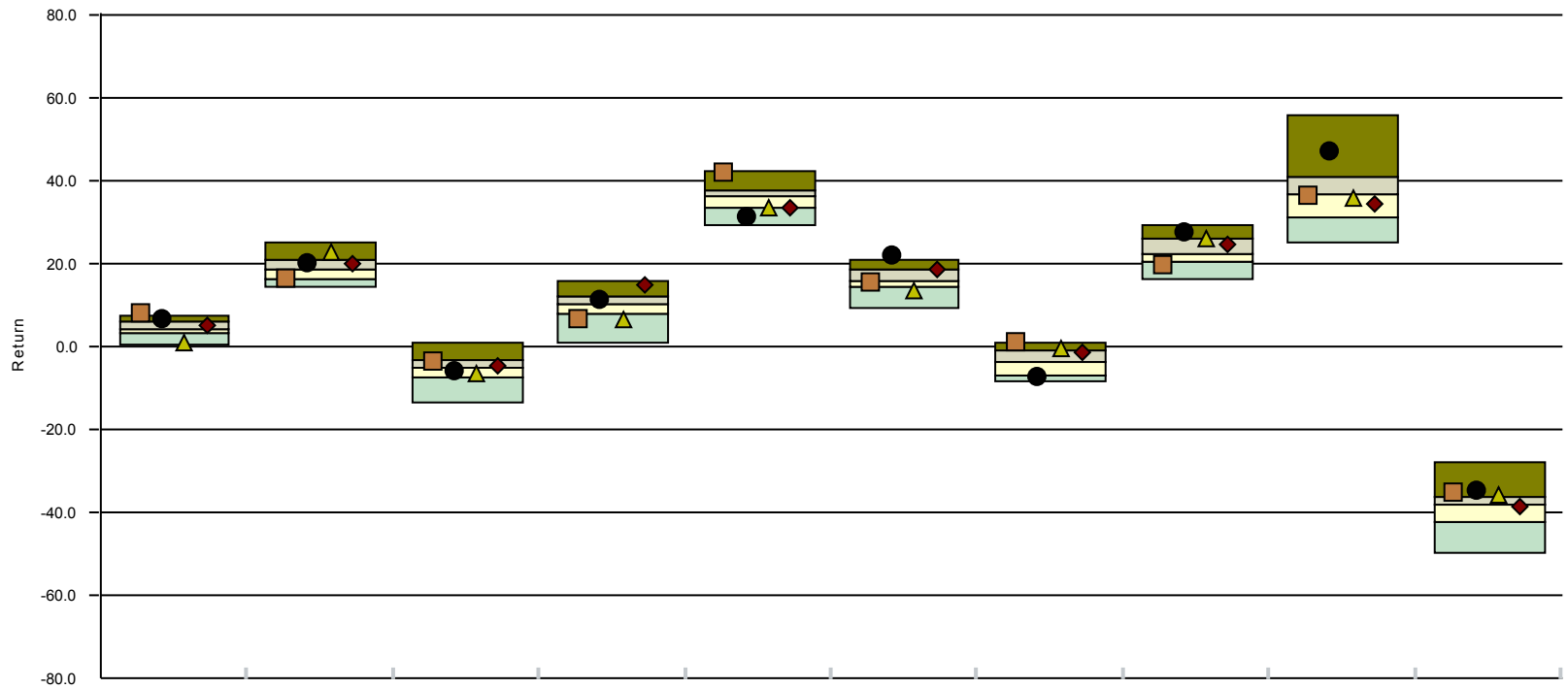
## PEER GROUP ANALYSIS - IM U.S. Mid Cap Value Equity (MF)



	Last Quarter	Year To Date	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
■ Vanguard Sel Value;Inv (VASVX)	2.20 (15)	8.10 (4)	24.27 (10)	8.66 (26)	6.10 (58)	14.75 (23)	14.64 (31)	7.40 (19)
● Virtus: Cer MC Val;I (SMVTX)	1.45 (48)	6.68 (20)	22.29 (15)	10.34 (11)	6.79 (33)	14.71 (24)	14.19 (44)	8.53 (7)
▲ BlackRock: Md Cp Div;I (MARFX)	-1.41 (97)	0.96 (94)	15.64 (69)	7.01 (60)	3.98 (87)	12.51 (84)	13.43 (67)	6.68 (43)
◆ Russell Midcap Value Index	1.37 (55)	5.18 (39)	15.93 (66)	9.40 (15)	7.46 (22)	15.14 (16)	15.29 (10)	7.23 (28)
5th Percentile	3.06	7.39	25.98	10.83	8.79	15.96	15.63	8.81
1st Quartile	1.92	6.13	20.42	8.73	7.20	14.64	14.81	7.28
Median	1.42	4.29	17.12	7.27	6.28	14.01	14.04	6.34
3rd Quartile	0.10	3.24	15.32	6.55	5.42	13.19	12.72	5.04
95th Percentile	-0.98	0.32	13.96	2.54	1.84	10.68	10.78	3.21

# IM U.S. Mid Cap Value Equity (MF) as of 06/30/17

## PEER GROUP ANALYSIS - IM U.S. Mid Cap Value Equity (MF)



	Year To Date	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ Vanguard Sel Value;Inv (VASVX)	8.10 (4)	16.34 (74)	-3.80 (38)	6.36 (83)	42.04 (6)	15.25 (65)	0.82 (7)	19.44 (90)	36.26 (54)	-35.49 (21)
● Virtus: Cer MC Val;I (SMVTX)	6.68 (20)	20.16 (38)	-6.00 (57)	11.00 (41)	31.21 (84)	21.79 (4)	-7.31 (86)	27.66 (8)	46.98 (11)	-34.79 (15)
▲ BlackRock: Md Cp Div;I (MARFX)	0.96 (94)	22.77 (14)	-6.69 (66)	6.68 (81)	33.72 (73)	13.62 (87)	-0.26 (16)	26.07 (21)	35.86 (55)	-35.72 (23)
◆ Russell Midcap Value Index	5.18 (39)	20.00 (40)	-4.78 (50)	14.75 (11)	33.46 (75)	18.51 (23)	-1.38 (31)	24.75 (33)	34.21 (58)	-38.44 (54)
Median	4.29	18.48	-4.95	10.26	36.08	16.04	-3.86	22.14	36.94	-38.12

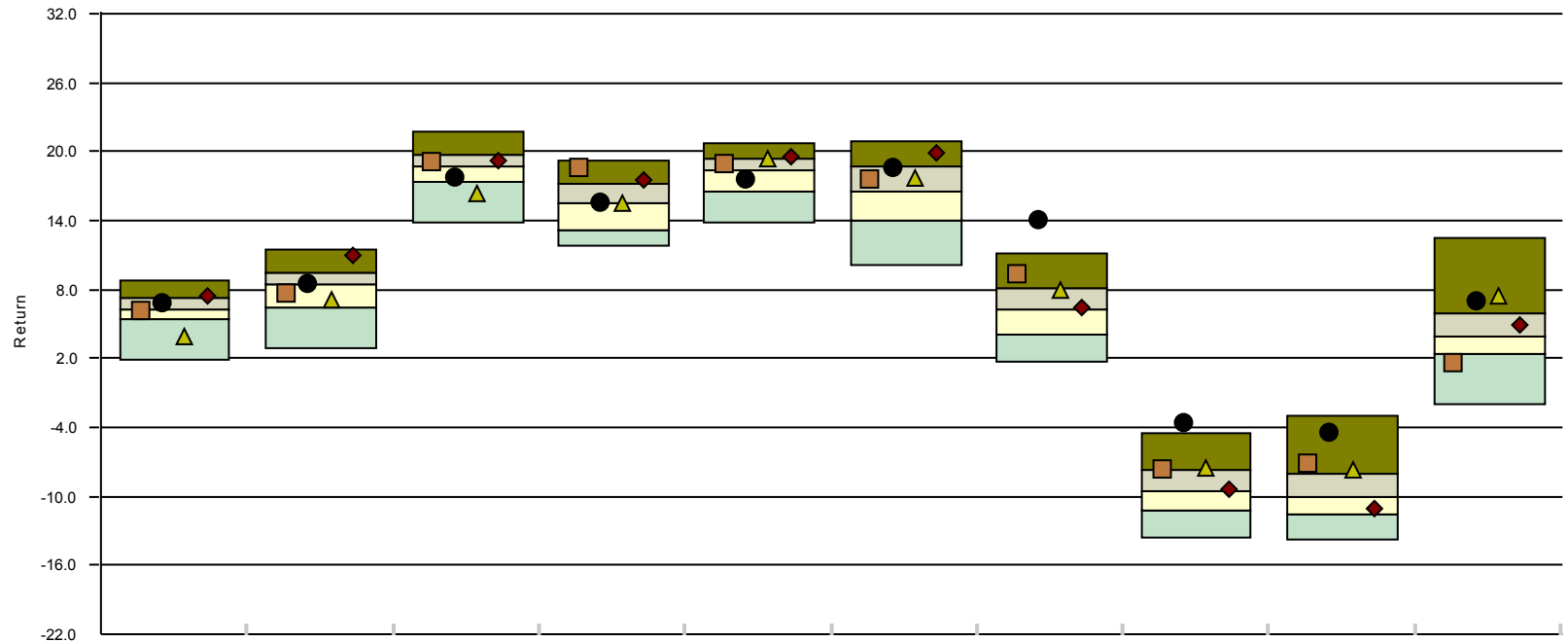
### CONSISTENCY COUNT

	Benchmark	Median
Fund 1	6/10	5/10
Fund 2	6/10	7/10
Fund 3	6/10	4/10



# IM U.S. Mid Cap Value Equity (MF) as of 06/30/17

## PEER GROUP ANALYSIS - IM U.S. Mid Cap Value Equity (MF)



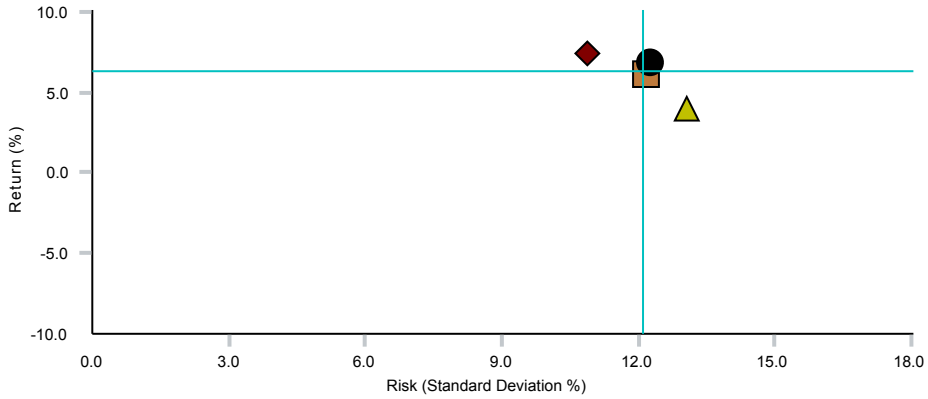
	3 Years Ending Jun-2017	3 Years Ending Jun-2016	3 Years Ending Jun-2015	3 Years Ending Jun-2014	3 Years Ending Jun-2013	3 Years Ending Jun-2012	3 Years Ending Jun-2011	3 Years Ending Jun-2010	3 Years Ending Jun-2009	3 Years Ending Jun-2008
■ Vanguard Sel Value;Inv (VASVX)	6.10 (58)	7.66 (63)	19.00 (45)	18.49 (11)	18.83 (46)	17.50 (40)	9.34 (17)	-7.75 (27)	-7.28 (18)	1.63 (83)
● Virtus: Cer MC Val;I (SMVTX)	6.79 (33)	8.42 (51)	17.73 (74)	15.45 (51)	17.55 (63)	18.61 (28)	13.96 (1)	-3.61 (3)	-4.56 (10)	6.93 (15)
▲ BlackRock: Md Cp Div;I (MARFX)	3.98 (87)	7.06 (70)	16.34 (83)	15.58 (48)	19.41 (25)	17.76 (37)	7.95 (29)	-7.54 (24)	-7.72 (22)	7.49 (14)
◆ Russell Midcap Value Index	7.46 (22)	11.00 (11)	19.13 (43)	17.56 (19)	19.53 (22)	19.92 (10)	6.35 (50)	-9.44 (50)	-11.07 (70)	4.97 (38)
Median	6.28	8.44	18.68	15.48	18.46	16.54	6.27	-9.49	-10.08	3.97

### CONSISTENCY COUNT

	Benchmark	Median
Fund 1	4/10	7/10
Fund 2	4/10	6/10
Fund 3	4/10	7/10

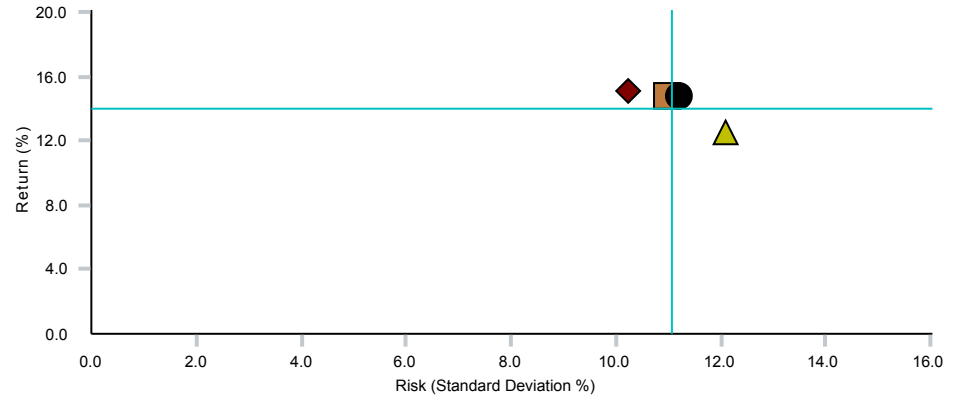
# IM U.S. Mid Cap Value Equity (MF) as of 06/30/17

## RETURNS VS. STANDARD DEVIATION - 3 YEARS



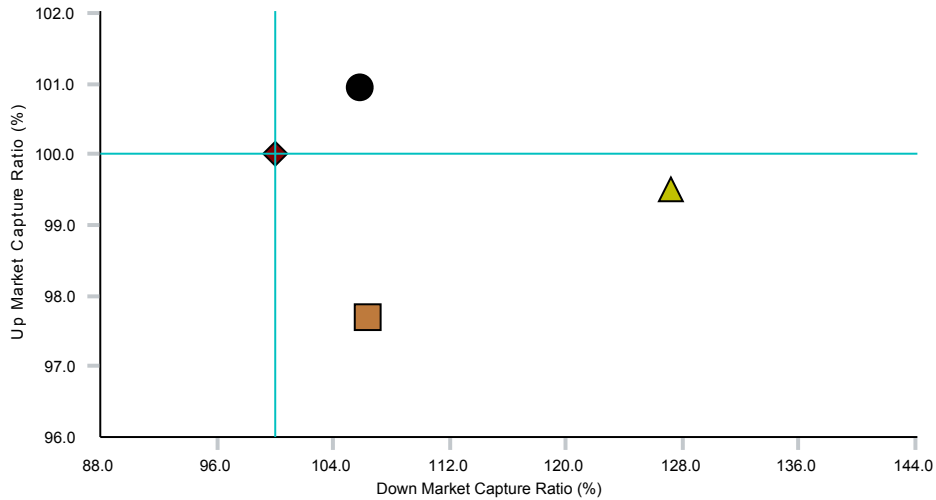
	Return	Standard Deviation
Vanguard Sel Value;Inv (VASVX)	6.10	12.18
Virtus: Cer MC Val;I (SMVTX)	6.79	12.27
BlackRock: Md Cp Div;I (MARFX)	3.98	13.08
Russell Midcap Value Index	7.46	10.89
Median	6.28	12.09

## RETURNS VS. STANDARD DEVIATION - 5 YEARS



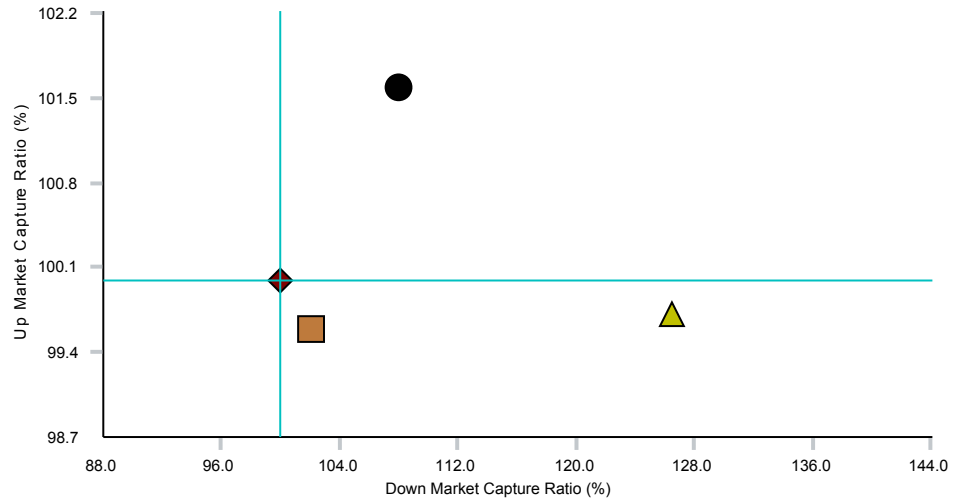
	Return	Standard Deviation
Vanguard Sel Value;Inv (VASVX)	14.75	11.01
Virtus: Cer MC Val;I (SMVTX)	14.71	11.22
BlackRock: Md Cp Div;I (MARFX)	12.51	12.11
Russell Midcap Value Index	15.14	10.24
Median	14.01	11.08

## UP/DOWN CAPTURE CHART - 3 YEARS



Vanguard Sel Value;Inv (VASVX)	Virtus: Cer MC Val;I (SMVTX)
BlackRock: Md Cp Div;I (MARFX)	Russell Midcap Value Index

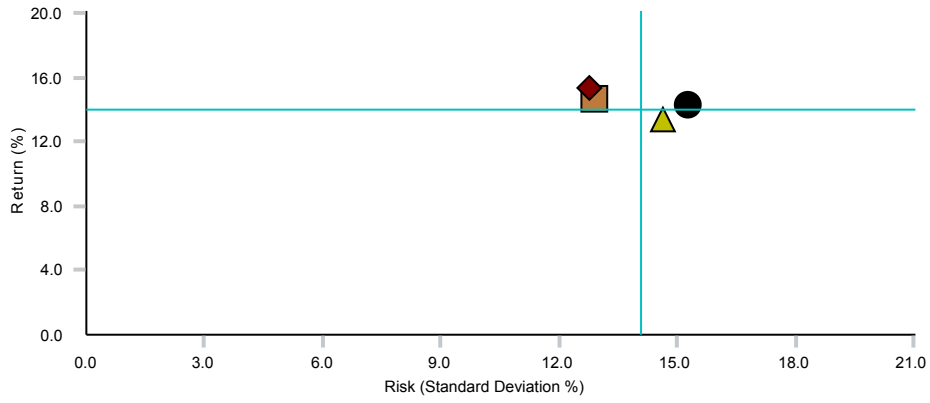
## UP/DOWN CAPTURE CHART - 5 YEARS



Vanguard Sel Value;Inv (VASVX)	Virtus: Cer MC Val;I (SMVTX)
BlackRock: Md Cp Div;I (MARFX)	Russell Midcap Value Index

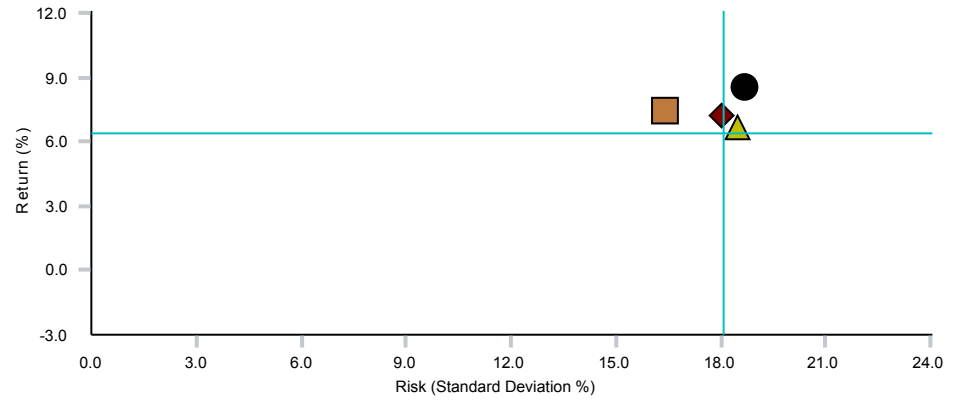
# IM U.S. Mid Cap Value Equity (MF) as of 06/30/17

## RETURNS VS. STANDARD DEVIATION - 7 YEARS



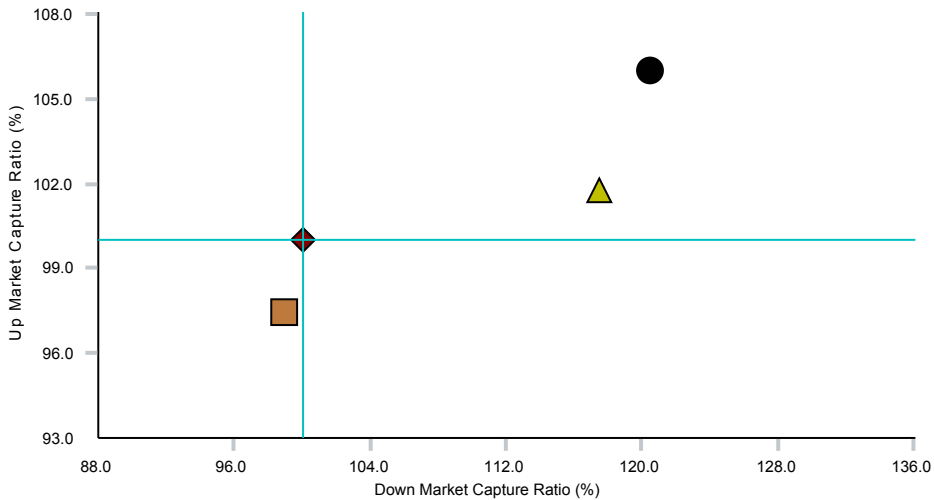
	Return	Standard Deviation
Vanguard Sel Value;Inv (VASVX)	14.64	12.94
Virtus: Cer MC Val;I (SMVTX)	14.19	15.30
BlackRock: Md Cp Div;I (MARFX)	13.43	14.66
Russell Midcap Value Index	15.29	12.79
Median	14.04	14.09

## RETURNS VS. STANDARD DEVIATION - 10 YEARS



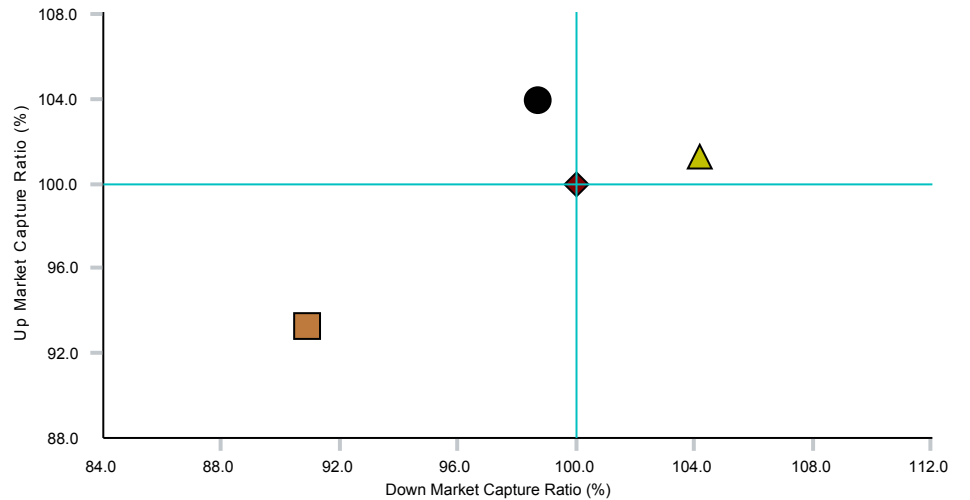
	Return	Standard Deviation
Vanguard Sel Value;Inv (VASVX)	7.40	16.42
Virtus: Cer MC Val;I (SMVTX)	8.53	18.74
BlackRock: Md Cp Div;I (MARFX)	6.68	18.47
Russell Midcap Value Index	7.23	18.05
Median	6.34	18.06

## UP/DOWN CAPTURE CHART - 7 YEARS



Vanguard Sel Value;Inv (VASVX)	Virtus: Cer MC Val;I (SMVTX)
BlackRock: Md Cp Div;I (MARFX)	Russell Midcap Value Index

## UP/DOWN CAPTURE CHART - 10 YEARS



Vanguard Sel Value;Inv (VASVX)	Virtus: Cer MC Val;I (SMVTX)
BlackRock: Md Cp Div;I (MARFX)	Russell Midcap Value Index

# GLOSSARY

**Alpha** measures a portfolio's return in excess of the market return adjusted for risk. It is a measure of the manager's contribution to performance with reference to security selection. A positive alpha indicates that a portfolio was positively rewarded for the residual risk that was taken for that level of market exposure.

**Beta** measures the sensitivity of rates of portfolio return to movements in the market. A portfolio's beta measures the expected change in return per 1% change in the return on the market. If the beta of a portfolio is 1.5, a 1 percent increase in the return of the market will result, on average, in a 1.5 percent increase in the return on the portfolio. The converse would also be true.

**Dividend Yield** - The total amount of dividends paid out for a stock over the preceding twelve months divided by the closing price of a share of the common stock.

**Down Capture Ratio** - The Down Capture Ratio is a measure of the Investment's compound return when the Benchmark was down divided by the Benchmark's compound return when the Benchmark was down. The smaller the value, the better.

**Duration** - A time measure of a bond's interest-rate sensitivity, based on the weighted average of the time periods over which a bond's cash flows accrue to the bondholder.

**Forecasted Long-Term Earnings Growth** - This growth rate is a measure of a company's expected long-term success in generating future year-over-year earnings growth. This growth rate is a market value weighted average of the consensus (mean) analysts' long-term earnings growth rate forecast for each company in the portfolio. The definition of long-term varies by analyst but is limited to a 3-8 year range. This value is expressed as the expected average annual growth of earnings in percent.

**Information Ratio** measures the excess return per unit of residual "non market" risk in a portfolio. The ratio is equal to the Alpha divided by the Residual Risk.

**Market Capitalization** - The market value of a company's outstanding shares of common stock at a specific point in time, computed as the product of the number of outstanding shares times the stock's closing price per share.

**P/E ratio** relates the price of the stock to the per-share earnings of the company. A high P/E generally indicates that the market will pay more to obtain the company because it has confidence in the company's ability to increase its earnings. Conversely, a low P/E indicates that the market has less confidence that the company's earnings will increase, and therefore will not pay as much for its stock. In most cases a fund with a high average P/E ratio has paid a premium for stocks that have a high potential for increased earnings. If the fund's average P/E ratio is low, the manager may believe that the stocks have an overlooked or undervalued potential for appreciation.

**P/B ratio** of a company relates the per-share market price of the company's stock to its per-share book value, the historical accounting value of the company's tangible assets. A high P/B ratio indicates that the price of the stock exceeds the actual worth of the company's assets. A low P/B ratio would indicate that the stock is a bargain, priced below what the company's assets could be worth if liquidated.

**P/CF ratio** compares the total market value of the portfolio to the portfolio's share of the underlying stocks' earnings (or book value, cash flow, sales or dividends).

**R-Squared** indicates the extent to which the variability of the portfolio returns is explained by market action. It can also be thought of as measuring the diversification relative to the appropriate benchmark. An R-Squared value of .75 indicates that 75% of the fluctuation in a portfolio return is explained by market action. An R-Squared of 1.0 indicates that a portfolio's returns are entirely related to the market and it is not influenced by other factors. An R-Squared of zero indicates that no relationship exists between the portfolio's return and the market.

**Residual Risk** is the unsystematic risk of a fund, or the portion of the total risk unique to the manager and not related to the overall market. This reflects the "bets" which the manager places in that particular asset class. These bets reflect emphasis in particular sectors, maturities (for bonds), or other issue specific factors which the manager considers a good investment opportunity. Diversification of the portfolio will reduce the residual risk of that portfolio.

**Sharpe Ratio** is a measure of risk-adjusted return. It is calculated by subtracting the risk-free return (90 day T-Bills) from the portfolio return and dividing the resulting "excess return" by the portfolio's total risk level (standard deviation). The result is a measure of returned gained per unit of total risk taken.

**Standard Deviation** is a statistical measure of portfolio risk. It reflects the average deviation of observations from their sample mean. Standard Deviation is used as an estimate of risk since it measures how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e. as a bell shaped curve distribution) then approximately 66% of 2/3 of the returns would occur within plus or minus one standard deviation of the sample mean.

**Style Exposure Chart** indicates a portfolio's exposure to a particular capitalization (large, medium or small) and style (value or growth). Based on Sharpe's return based style analysis, a style map will attempt to correlate a manager to a particular style of investing (i.e. Large Cap Growth).

**Turnover Ratio** - This is a measure of the fund's trading activity which is computed by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets.

**Up Capture Ratio** - The Up Capture Ratio is a measure of the Investment's compound return when the Benchmark was up divided by the Benchmark's compound return when the Benchmark was up. The greater the value, the better.

**Down Capture Ratio** - The Down Capture Ratio is a measure of the Investment's compound return when the Benchmark was down divided by the Benchmark's compound return when the Benchmark was down. The smaller the value, the better.

# FUND ANALYSIS OVERVIEW KEY

Each of the 6 criteria are evaluated on an individual basis and subjective based on Innovest's assessment. Below are examples of the many factors under each category we consider when making an assessment.

- **Organization Asset Base**
  - Pct. Owned by Employees Current
  - Boutique vs. Institutional Growth of AUM
  - Recent Changes in Ownership Capacity Constraints
  - Management Investment in Firm's Products Soft Closed
  - Specialized vs. All in One Re-opening of Products
- **People Performance**
  - Size of Team Short Term vs. Benchmark and Style Group
  - Structure of Team Long Term vs. Benchmark and Style Group
  - Experience of Team Consistency – Relative/Absolute/Risk Adjusted
  - Turnover of Key Members
  - Growth of Team with Assets
- **Philosophy/Process Expenses**
  - Style Consistency (Growth/Value, Market Cap) Cost vs. Competitors
  - Domestic/Int'l drift
- **Asset Base**
  - Current
  - Growth of AUM
  - Capacity Constraints
  - Soft Closed
  - Re-opening of Products
- **Performance**
  - Short Term vs. Benchmark and Style Group
  - Long Term vs. Benchmark and Style Group
  - Consistency – Relative/Absolute/Risk Adjusted
- **Expenses**
  - Cost vs. Competitors

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Examples of things that would cause concern resulting in a **YELLOW** or **RED** box include but not limited to:

1. ORGANIZATION - A change in ownership whereby it is unclear what the structure of the new organization will be, how will key personnel be compensated, and what type of employment contracts are in place to keep key decision makers.
2. PEOPLE - A change in portfolio manager would be a cause for concern. We would assess the new talent taking over. Is the new portfolio manager a current member of the team or is it someone new from outside the group or organization.
3. PHILOSOPHY/PROCESS - A change in portfolio characteristics would be a cause for concern. For example, if a growth style manager suddenly starts investing in value names during a value rally or if a small cap portfolio was migrating into midcap names due to asset growth.
4. ASSET BASE - A small cap fund with more than \$3 billion in assets would be a cause for concern or a fund that continues to add assets as it becomes clear the portfolio management team can not handle the inflows. A sign of this would be a large increase in the cash position of the portfolio.
5. PERFORMANCE - A product that fails to outperform either the index and/or the median manager on a consistent basis (at least 50% of the time) would be a cause for concern. Short term and long term performance is considered both on an absolute basis and relative basis in addition to risk-adjusted measures.
6. EXPENSES - A fund or product that is substantially above the median expense ratio or management fee would be a cause for concern.

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Note: Actual client mutual fund returns are reflected on the table of returns page. Fund pages subsequent to the table of returns reflect the representative mutual fund with the longest track record and may not be the actual share class held by the client.

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